REMARKS

Claims 1-22 were pending at the time of examination. Claims 1-22 were rejected. Claims 1, 9, 19 and 22 have been amended. No new matter has been added. Applicants respectfully request reconsideration of the rejections set forth in the Final Office Action dated April 20, 2007 in view of the preceding amendments and the following remarks.

In the Claims

Independent claim 1 has been amended to include multiple allocation and scheduling passes in a scheduling period. Independent claim 1 now recites:

a multiplexer designed or configured to

a) schedule packets from the multiple transcoded bitstreams in a first pass of scheduling in a scheduling period;

b) determine if bandwidth is available on the channel after the multiple transcoded bitstreams have been scheduled by the multiplexer in the first pass of scheduling, the available bandwidth including a difference between a bandwidth on the channel and a sum of a bandwidth needed for all of the packets from the multiple transcoded bitstreams scheduled in the first pass of scheduling, and if so, allocate additional packets from the multiple transcoded bitstreams in a second pass of scheduling in the scheduling period to use the determined available bandwidth on the channel after the multiple transcoded bitstreams have been scheduled by the multiplexer in the first pass of scheduling.

The amendments add no new matter; support for these amendments can be found throughout the present Specification, and in particular, at least at page 11 line 22 to page 17 line 20.

Rejections Under 35 U.S.C. §102

Claims 1-22 were rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,594,271 issued to Wu et al. (hereinafter 'Wu').

Wu describes "a method and apparatus for providing an opportunistic data capability for an existing statistical multiplexing encoder (See Abstract)."

Independent claim 1 now recites a multiplexer designed or configured to "schedule packets from the multiple transcoded bitstreams **in a first pass of scheduling in a scheduling period**," and "**determine if bandwidth is available on the channel after the multiple**

<u>transcoded bitstreams have been scheduled by the multiplexer in the first pass of scheduling</u>, the available bandwidth including a difference between a bandwidth on the channel and a sum of a bandwidth needed for all of the packets from the multiple transcoded bitstreams scheduled in the first pass of scheduling, <u>and if so, allocate additional packets</u> from the multiple transcoded bitstreams in a second pass of scheduling in the scheduling period <u>to use the determined available bandwidth</u> on the channel after the multiple transcoded bitstreams have been scheduled by the multiplexer in the first pass of scheduling."

It is respectfully submitted that Wu does not teach a multiplexer configured to perform a two-pass scheduling technique as recited in claim 1. As illustrated in FIG. 2 and described at column 8 lines 19-50, the Television Service Providers (#1-#N) and the Opportunistic Data Processor 160 determine their local quantization levels based upon the allocated bandwidth and global quantization level forwarded by the Quantizer Level Processor 130. Notably, the Quantizer Level Processor 130 calculates (block 200) the global quantization level based upon revised bandwidth need parameters sent by the Television Service Providers and the Opportunistic Data Processor 160 at block 270 of the <u>previous cycle</u>. Thus, Wu assesses his available bandwidth in one cycle, and uses this space for allocation in the next cycle (not in the same cycle as claimed).

In contrast, according to claim 1, if bandwidth is available on the channel after the multiple transcoded bitstreams have been scheduled by the multiplexer in a first pass of scheduling, additional packets are allocated from the multiple transcoded bitstreams in a second pass of scheduling <u>within the same period</u> to make use of <u>the available bandwidth determined during the same period</u>.

For at least these reasons, Applicants respectfully submit that Wu does not teach nor suggest the combination of limitations recited in independent claim 1, and that the 35 U.S.C. 102 rejection of claim 1 should be withdrawn.

Independent claims 9, 19 and 22 recite similar limitations to those recited in claim 1, and hence, it is respectfully submitted that the rejection of these claims be withdrawn for at least the reasons set forth above with regard to independent claim 1.

Dependent claims 2-8, 10-18 and 20-21 each depend either directly or indirectly from independent claims 1, 9, and 19, respectively, and are patentable over the cited art of record for at least the reasons set forth above with respect to the independent claims. In addition, the

dependent claims recite additional elements which when taken in the context of the claimed invention further patentably distinguish the art of record.
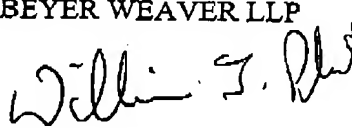
Based on the foregoing, Applicants respectfully submit that all pending claims are allowable over the art of record. Withdrawal of all rejection under 35 U.S.C. § 102(e) is therefore respectfully requested.

CONCLUSION

Applicants believe that all pending claims are allowable and respectfully request a Notice of Allowance for this application from the Examiner. Should the Examiner believe that a telephone conference would expedite the prosecution of this application, the undersigned can be reached at the telephone number set out below.

Respectfully submitted,

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